EPA, CDH Addendum to Tetra Tech's Comments

DOE/Rockwell makes several references in the 903 Phase II-sampling plan to the CEARP Generic Monitoring Plan (CGMP) and the Site-Specific Monitoring Plan (SSMP), both submitted in February of 1987. These plans were developed to meet commitments under the July 31, 1986, Compliance Agreement (see Task 3.8), and to conform to DOE's Comprehensive Environmental Assessment and Response Program (CEARP).

CEARP was intended to utilize a three tier approach, dependant upon the overall umbrella procedures, or the CGMP, which would give way to the Installation Generic Monitoring Plan (IGMP) then, eventually, result in specific procedures under the SSMP. The SSMP phase would be further developed under stages of site investigation at specific areas (i.e. stages 1, 2, 2a, 2b, etc.).

While CEARP is impressive in its screening process, and procedural consistency, CEARP fails to address clearly what site specific concerns are necessary for adequate characterization. The main draw back to the CEARP approach is that it assumes initial stages of sampling efforts will lead to discovery that less effort and/or research is or will be needed in later stages. This biases the information gathering intent of CEARP. For example, should a situation occur wherein contamination problems are worse or of further extent than estimated, the CEARP approach leans toward not anticipating this type of a finding.

For the 903, Mound and East Trenches High-Priority areas, the specific site sampling plans are found in Rockwell International's and DOE's June 30, 1988, submittal of the "Phase II-Sampling Plan." Under the SSMP, the stages of CEARP Phase 2b are specifically designed to minimize the total numbers of samples required to adequately characterize any given site (see 5.2 of the SSMP, Feb. 1987). This only works if you assume the extent of contamination is relatively well known and accepted. It is often the case, that once site investigation begins, contamination is quantified in such a manner which show the extent and concentration of contamination is beyond estimates available by historical records.

This is why a site specific plan, such as the Phase II-Sampling Plan is very important. If the plan is not flexible enough or extensive enough, contamination assessment is inadequate. EPA's contractor (Tetra Tech) did not completely evaluate the CGMP or the SSMP which was submitted in 1987 in relationship to the 903 Pad, East trenches, and Mound, Phase II-Sampling Plan. The Phase II plan makes reference as to what methods for site characterization need to be adopted from the CGMP and SSMP.

Originally, during planning phases of these site investigations, EPA and CDH agreed that DOE and Rockwell International need not duplicate the procedures in the CGMP and SSMP, but do need to make specific references (i.e. when referring to the site safety plan, reference pertinent sections of the CGMP and SSMP such as 3.2.2.1, 4.1.2. for the 903 Pad investigation). It is worth noting here that the organization of the CGMP and SSMP is difficult to follow. Also, certain statements in these plans are outdated by findings in more recent documents. For example, the SSMP identifies chlorinated hydrocarbons as the primary hazardous chemical (see 4.1.4.) for the East Trenches. While the SSMP addresses that radioactive material is known to exist and the site needs to be evaluated, it does not consider the existence of pyrophoric radionuclides in trench T1.

Since these investigations are far more complicated than expected, it would be prudent to have specific sampling methods, QA/QC, Site Safety Plans, etc. incorporated into the phase II documents. For this reason, EPA and CDH support the comments of Tetra Tech to revise the plan to be a stand alone document.

While the Quality Assurance, Quality Control Plan defined in the CGMP and SSMP adequately addresses the needs for proper environmental sampling, problems were identified in the 881 RI reports with regard to implementation. DOE and Rockwell International need to assure that the SSMP QA/QC procedures are followed (i.e. section 3.2 of the QA/QC plan - field and trip blanks) QA/QC data need be reported to CDH and EPA.